

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Canceled)
2. (Currently Amended) A headlamp apparatus for a vehicle comprising:
a steering device coupled to a steering wheel; and
control means for controlling a light distribution of the headlamp based on a steering angle of the steering device, wherein the control means detects a straight steering position of the steering device from an origin position signal output by the steering device for each rotation of the steering wheel and when a difference between a left wheel speed and a right wheel speed is equal to or less than a predetermined value
wherein the steering device comprises
a rotary disk, attached to a steering shaft of the steering wheel, having a plurality of unit slits circumferentially positioned on the rotary disk and an origin slit positioned at an inside diameter of said unit slits;
at least one origin slit detector that generates the origin position signal when the origin slit passes the origin slit detector; and
at least two unit slit detectors separated at a half pitch from each other on the circumferential position of said unit slits, to generate respectively at least two pulse signals,
wherein the control means controls the light distribution by adjusting the headlamp based on a degree of rotation of the steering wheel.

3. (Previously Presented) The headlamp apparatus for a vehicle according to claim 2, wherein the control means detects the straight steering position when a vehicle speed of the vehicle has at least a predetermined value.

4. (Previously Presented) The headlamp apparatus for a vehicle according to claim 2, wherein the control means detects the straight steering position and corrects the straight steering position based on at least one of an integrating time in a steering angle position and an integrated running distance.

5. (Canceled)

6. (Currently Amended) A headlamp apparatus for a vehicle, comprising:
a first speed sensor that is coupled to a first wheel and senses a first wheel speed,
and a second speed sensor that is coupled to a second wheel and senses a second wheel speed;
a steering sensor that is coupled to a steering shaft of a steering wheel for turning
the vehicle and detects a degree of rotation of the steering wheel;
a controller that controls light distribution in a headlamp and initializes a straight
position of the headlamp when the first wheel speed and the second wheel speed exceed or equal
a first threshold, and when a difference between the first wheel speed and the second wheel
speed is equal to or less than a second threshold; and

~~The apparatus of claim 5, further comprising:~~

a vehicle velocity sensor that senses a vehicle velocity, wherein the said controller initializes the said straight position when the said vehicle velocity exceeds or equals a third threshold.

7. (Currently Amended) The apparatus of claim 6 ~~5~~, further comprising at least one actuator for adjusting a position of the said headlamp in response to an output from the said controller.

8. (Currently Amended) A headlamp apparatus for a vehicle, comprising:
a first speed sensor that is coupled to a first wheel and senses a first wheel speed,
and a second speed sensor that is coupled to a second wheel and senses a second wheel speed;
a steering sensor that is coupled to a steering shaft of a steering wheel for turning
the vehicle and detects a degree of rotation of the steering wheel;
a controller that controls light distribution in a headlamp and initializes a straight
position of the headlamp when the first wheel speed and the second wheel speed exceed or equal
a first threshold, and when a difference between the first wheel speed and the second wheel
speed is equal to or less than a second threshold;

~~The apparatus of claim 5, said steering sensor further comprising:~~

~~a rotary disk attached to the said steering shaft and having a plurality of unit slits~~
~~circumferentially positioned on the said rotary disk, and an origin slit positioned at an inside~~
~~diameter of the said unit slits;~~

~~at least one origin slit detector that generates an origin position signal when the~~
~~said origin slit passes the said origin slit detector; and~~

~~at least two unit slit detectors separated at a half pitch from each other on the said~~
~~circumferential position of the said unit slits, to generate respectively at least two pulse signals,~~
~~wherein the said controller controls the said light distribution by adjusting the said headlamp~~
~~based on the said degree of rotation.~~

9-10. (Canceled)

11. (New) The apparatus of claim 8, further comprising at least one actuator for
adjusting a position of the headlamp in response to an output from the controller.